

Minutes
Radiation Advisory Board Meeting
July 10, 2006
State Emergency Operations Center
7700 Midlothian Turnpike
Richmond, VA 23235

Members Present: Lee S. Anthony, Sr., Ph.D., Mary Ann Turner, M.D., Drexel Nelson Harris and Rand Wachsstock D.V.M.,

Members Absent:, Edway R. Johnson, Joyce O. Hawkins, Panos P. Fatouros, Ph.D., Andrew C. Boone, Jr., Ted Sherwin, D.D.S., and James R. Thornton

Ex Officio Members Present: Carl Armstrong, M.D., representing the State Health Commissioner, Bob Wickline representing the Department of Environmental Quality (DEQ); and Ronald Graham representing the Department of Labor and Industry.

Staff Present: Susan Fischer Davis, M.D., Acting Deputy Director, Office of Epidemiology; Leslie P. Foldesi, Director, Division of Radiological Health Program; James deKrafft, Supervisor, Radioactive Materials Program; and Stan Orchel, Jr., Supervisor, X-ray Machine Program

Guests Present: Terry Eastman R.T., FASRT, Technical Director, Radiographic Techniques, Roanoke, VA; and Dan White, medical physicist consultant

Call to Order

Dr. Carl Armstrong called the meeting to order at 10:00 a.m. All attendees present were acknowledged with a brief introduction. Rand Wachsstock, D.V.M. was introduced as the newest member effective December 13, 2005. Dr. Armstrong introduced Susan Fischer Davis, M.D., Acting Deputy Director, Office of Epidemiology.

Dr. Armstrong asked if there were any additional items to be included on the agenda as presented; none was added, and the agenda was approved. The meeting moved to the motion for approval of the Minutes for the November 2, 2005 meeting. The minutes were approved as presented.

Leslie P. Foldesi, Director, Division of Radiological Health Program presented an overview of the following activities:

Update on Training and Equipment Purchases

Following up on a concern raised at the last Radiation Advisory Board meeting, efforts were made to increase availability of training to program staff. The Program Director attended the National Conference on Radiation Control Program Directors, and Ryan Paris attended two one-week courses offered by the Nuclear Regulatory Commission for licensing and inspecting radioactive materials facilities.

The Program is procuring the following equipment:

- X-ray inspection equipment to replace that loaned to the state by FDA
- Mobile laboratory to replace existing laboratory damaged in Gaston flooding
- New gamma spectrometer and detector for new mobile laboratory

- New alpha beta counter
- Upgrade software for the TLD reader

In the following state fiscal year plans are to replace the state owned X-ray inspection equipment.

Re-structuring of the Radiological Health Program

The Radiological Health Program was elevated to a division in the Office of Epidemiology. The program director's position was upgraded and reports to the Deputy Director in the Office of Epidemiology. An assistant business manager was assigned to relieve the program director of some fiscal duties, to give the program director more time for technical aspects of the program. A new section in the Radiological Health Program was created for regulation of radioactive materials with a supervisor and staff of four Specialists and a Fiscal Technician.

NRC Agreement State Program and radioactive materials

- Based on the encouragement from the Radiation Advisory Board and the positive response from the October 11, 2005 letter sent to the NRC licensees, the agency requested the Governor to submit a letter of intent to the NRC. Governor Warner sent a letter of intent on December 14, 2005.
- VDH staff conducted an on site visit of the North Carolina program. The NC staff suggested that we go with the basic agreement and strongly recommended we avoid the seal source evaluations. Licensee requests for sealed source evaluations are sporadic and very labor intensive.
- NRC State and Tribal Program staff met with VDH staff on April 25, 2006. The STP director, Ms. Janet Schluter, and her staff provided an overview of the Agreement State Program and the application process. The NRC staff were very encouraging and suggested that a state could make the transition in as little as two years. It was noteworthy that the application may be submitted to NRC before the program has trained staff in place.

The following processes were discussed at the meeting:

- Draft application- Based on Wisconsin's application.
- NRC review takes one year
- Radiation regulations- completed, but will initiate again next year to incorporate new NRC regulations
- Fee schedule- takes 18 months to go through the administrative process.
- Recruit and train six new employees- six months for recruitment, and one year for training.

X-ray Machine program

- Private Inspectors- The new regulation include new requirements for the Private Inspectors. Many of the current private inspectors are out of state and have never provided services to registrants in Virginia. The new requirements include currency in inspections and continuous training requirements.
- Earlier this year another private inspector was identified who submitted false credentials to the Department of Health and to his clients indicating he had a PhD., when in fact he did not even have a bachelor's degree. VDH staff has

reviewed and confirmed the degrees private inspectors have submitted as well as verified certifications with the American Board of Medical Specialties.

- At the annual meeting of the Conference of Radiation Control Program Directors, the FDA announced that they were going to withdraw support for providing X-ray inspection equipment and calibration services to the states. The FDA also encouraged the states to move from X-ray machine safety inspections to requiring X-ray machine facilities to implement quality improvement programs for radiology imaging services.
- Dr. Turner pointed out that the American College of Radiology has an accreditation program for various radiographic modalities and questioned whether this would be a duplication of effort if the states implemented their own program. Les Foldesi responded that the states would require participation in the otherwise voluntary program, and for modalities that the ACR has no program, the states would need to develop a program, such as for dentistry where the ACR would have no interest.

Environmental, radon, and Emergency Planning

VDH conducts environmental monitoring activities at the North Anna and Surry nuclear power stations, BWXT fuel fabrication facility, and the two shipyards. The reports are now available on line at VDH's website.

VDH measures the ambient radiation levels for the two nuclear power stations using TLDs and has its own TLD reader, purchased in the early 1990s. VDH has recently purchased software to make data reporting easier using Windows-based software.

The EPA State Indoor Radon Grant was reduced from \$75,000 to \$56,000. The grant was a 50/50 matching grant with state funds in previous years; however this year its is a 60% federal funds matching 40% state funds.

VDH received approval from CDC to spend \$550,000 in federal grant funds to replace the mobile radiation laboratory with a mobile incident command type vehicle. This laboratory will replace the one dedicated to responding to nuclear power plant exercises/incidents. This laboratory will require the use of a heavy shield for the detector to achieve the minimum detection limits required for the ingestion pathway phase of an emergency response.

Jim Linduff, Radiation Safety Technician, resigned his position to take a law enforcement position in Oklahoma. Jim collected portable radiological monitoring equipment from the local jurisdictions near the two nuclear power stations and re-deployed the equipment after calibration and repair. The wage position is currently being converted into a full time position and will include emergency planning duties.

TOPPOFF IV is a Homeland Security exercise designed for participation by top state and federal government officials. In June of this year several planning activities were conducted for TOPOFF IV scheduled for next year. VDH staff attended a training activity that was focused on the evacuation assembly centers and special needs population. The planning session was conducted at the Greater Capitol District's Council of Government's facility in Washington DC. It was understood that there was a

radiological component to the scenario; however, it was not until the day of the training session that we learned that the scenario involved two nuclear weapons.

VOPEX is the acronym for the Virginia Operational Exercise, and usually refers to the evaluated nuclear power plant exercises. The one for Surry was conducted on February 7, 2006. Our Mobile Lab vehicle was not used in the exercise because it had a brake failure the day before the exercise. The vehicle was permanently taken out of commission since it was no longer reliable as an emergency response vehicle. The program did receive a few areas needing corrective action that will require some attention and additional resources. Dr. Turner asked how the Program would respond to an emergency requiring the mobile laboratory. Les Foldesi responded that the Program has a smaller mobile laboratory that is used to respond to scrap metal facilities and transportation incidents. The field laboratory can also support the plume phase of a nuclear power plant accident; however, the equipment does not have the minimum detection limits necessary to analyze smaller levels of radioactive material required for the ingestion phase of the accident, where ingestion by cows foraging on pasture contaminated from the airborne plume is the primary concern. The State would need to arrange for the transportation of these samples to the State's Division of Consolidated Laboratories for these analyses, or depend on federal resources. The replacement laboratory should be available in a year. The next ingestion phase exercise will be in the year 2008.

The next VOPEX for North Anna will be on December 5, 2006.

EPA has announced that it will provide updated radiological emergency response guidance later in 2006.

In addition to the 130 mg potassium iodide thyroid blocker pills that the NRC provided those states that requested KI for the general population in event of a nuclear power plant accident, NRC has also provided KI in liquid form for children or adults who cannot swallow pills easily, and 65mg pills for children. The liquid KI and pills will be distributed among the localities near the nuclear power plants and the host jurisdictions of evacuees from the affected area.

Old Business

None

New Business

Dr. Anthony commented on the need for additional support for emergency planning activities associated with civil defense for nuclear weapon attacks.

Public Comments

Terry Eastman, R.T., FASRT, Technical Director, Radiographic Techniques, Roanoke, VA. Mr. Eastman is an advocate for use of technique charts by X-ray machine operators to ensure the reinforcement of the concept of *ALARA* (*Apply Low as Reasonably Achievable*) radiation exposure to patients.

Mr. Eastman provided the following questions:

1. What is the Status of 12 VAC 5-481-1590?
2. When published in the Virginia Register, will registrants be mailed a copy of the revised regulations or go on line to review them?

3. Who will perform monitoring activities for compliance with exposure guides?
4. If a registration is found to be in non compliance (with respect to X-ray technique charts) and does not take corrective action what enforcement actions will VDH take?

Les Foldesi provided the following response to each question.

1. The Board of Health approved the proposed regulations as final regulations on April 21, 2006, and then underwent an executive review. VDH received notice on July 7, 2006 that the executive review had been completed and the agency may publish the final regulations. This will involve getting the State Health Commissioner's signature on a copy of the regulations, and submitting the regulations and two additional forms to the Virginia Register. The Virginia Register is published twice a month and the effective date of the regulations is dependent on the publication date. VDH staff anticipate an effective day sometime in July or August 2006.
2. The regulations will be available to the registrants upon request, and will also be available online on the state web page.
3. Monitoring of compliance with the regulations for X-ray equipment is a joint effort among the private inspectors, and VDH inspectors. VDH staff intend to meet with the private inspectors to educate the inspectors of the new requirements and areas of concern during inspection of X-ray equipment.
4. Enforcement of the regulations with respect to X-ray equipment used in the healing arts is based on whether the non-compliance has been categorized a serious or non-serious. With respect to serious items of non-compliance, the registrant is given a time frame to correct the deficiency. If the registrant fails to take corrective action, certification is withdrawn, and the registrant's licensing board is notified. In the case of non- serious items of non-compliance the registrant is notified that they have until the next inspection cycle to correct the deficiency.

Next Meeting

Dr. Armstrong suggested that the Advisory Board meeting be scheduled far in advance so members may hold the dates in their respective schedules. Dr. Armstrong also suggested the Board could meet twice a year, in November and May. With respect to the most convenient day of the work week, Dr. Turner indicated Fridays are not convenient. VDH staff will notify Advisory Board members as soon as practical of the next meeting in November.

Adjournment

The meeting was adjourned at 11:30 am, followed by a tour of the State Emergency Operations Center (EOC) with Ray Parker, VDEM Operations, and lunch in the State EOC.